Montana Department of Transportation
PO Box 201001
Helena, MT 59620-1001

MEMORANDUM

To: See Distribution

From: Mark Wissinger, P.E.
Construction Engineer

Date: October 23, 2006

Subject: Supplemental Specification Revision: 401.03.11 Constructing Joints

The Construction Administration Services Bureau is proposing revisions to Standard Specification, 401.03.11 Constructing Joints**.** Following the Standard Specification Revision Process outlined in the Construction Engineer's Memorandum dated January 9, 2002 the following information is provided.

1. Standard Specification, 401.03.11 will be modified.

2. The Proposed Draft of the change is attached along with this memorandum.

3. Revision to the Standard Specification is needed to promote safety and pavement longevity by controlling the location of longitudinal joints.

4. Those impacted by the change include:

   Contractors, MDT Field Crews

5. The following individuals were consulted and/or involved in developing the proposed revisions:

   MDT Field Crews, MDT CES Bureau, MDT DCE's

*It is requested that written comments on **the proposed revisions only**, be returned to **mdtspecifications@mt.gov** no later than November 30, 2006.*

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401.03.11 Constructing Joints

Continuously place each lift and provide at least a 6-inch (150 mm) offset between longitudinal joints in successive lifts. Offset transverse joints in successive lifts by at least 6 feet (1.8 m).

Correct joints not meeting the surface tolerance requirements to Subsection 401.03.14 requirements.

Uniformly coat the exposed face of all joints, excluding those formed by echelon paving, with SS-1 emulsified asphalt or other approved bitumen just before placing the abutting course.

Construct longitudinal joints in the top lift of plant mix at the centerline or lane line. Obtain approval from the Project Manager to construct the joint at any other location..

Construct a vertical transverse joint the full lift depth if the mix cools below 175 °F (80 °C) before placing additional mix. Remove loose material, brush the joint face with asphalt, and compact the fresh mix against the joint face when paving is resumed.

Bevel the paving lift ends on roadways under traffic at a 20:1 ratio. When paving of the lift resumes, construct transverse joints.

It is preferred that exposed longitudinal joints between driving lanes be avoided by constructing abutting passes equally by the end of paving each day. If an exposed longitudinal joint remaining at the end of a day's paving is not located outside of the temporary driving lines to be occupied by traffic, delineate and sign the exposed joint at no additional cost to the Department. Obtain the Project Manager's prior approval of the delineation and signing.

When the compacted thickness exceeds 3/4-inch (19 mm), taper longitudinal joints with a 5:1 slope or flatter. Do not permit an exposed longitudinal joint length to exceed one day's paving run. Compact the joint to a minimum 95 percent of Marshall density.

Sign the new pavement end at the close of work each day meeting the traffic control plan and contract.

Construct joints at bridge ends or other rigid structures after the existing base is prepared and compacted. Apply a coat of SS-1 emulsified asphalt to portions of structures abutting the plant mix pavement.

The same changes would be made to the Grade S Special Provisions 401-1a Volumetric Acceptance and 401-1b Non-Volumetric Acceptance under part C. Construction Requirements 18) Constructing Joints